

## **REMARKS**

In summary, claims 1, 3-6, 8-11, 13-16, 18-24, 26, 27, and 29-48 are pending. Claims 1, 3-6, 8-11, 13-16, 18-24, 26, 27, and 29-48 are rejected under 35 U.S.C. §102. Claims 1, 3-6, 8-11, 13-16, 18-24, 26, 27, and 29-48 are rejected under 35 U.S.C. §103. Applicant respectfully traverses the rejections. Claims 1, 11, 20, 27 and 40 are hereby amended. No new matter is added.

### **Claim Rejections - 35 U.S.C. §102**

Claims 1, 3-6, 8-11, 13-16, 18-24, 26, 27, and 29-48 are rejected under 35 U.S.C. § 102(e) as being anticipated by Colossi *et al.*, “Relational extensions for OLAP”, IBM Systems Journal, Vol. 41, No 4, 2002 pages 714- 731 (hereinafter referred to as “Colossi”).

Colossi neither disclose nor suggests “new relationships between said attributes ... said new relationships are not subject to attribute restrictions placed on the database; and said new relationships modify at least one relationship between said attributes” as recited in amended independent claims 1, 11, 20, 27 and 40.

The relationships identified in Colossi show different views of data already present within a database, regardless as to whether the database is a relational database or other type of database. As shown in Figure 6, on page 724, of Colossi, attributes, joins, attribute relationships, and hierarchies are limited to the base layer of the Colossi database model. As stated on page 724 of Colossi, the base layer provides base infrastructure to other objects and encapsulates important concepts of the relational database. As such, each of the relations as described is fixed in the database.

In contrast to Colossi, Applicant’s claimed invention is directed to defining new relationships between attributes, wherein the new relationships are not subject to restrictions placed on the database and the new relationships modify at least one relationship between the existing attributes relationships. This results in a more robust data model than taught in Colossi. This more robust data model provides immediate views of the data and improves response time to designers and users of the data processing system. Applicant has found no

teaching, in Colossi, of defining new relationships between attributes, wherein the new relationships are not subject to restrictions placed on the database and the new relationships modify at least one relationship between the existing attributes relationships.

Accordingly, because Colossi neither disclose nor suggests “new relationships between said attributes ... said new relationships are not subject to restrictions placed on the database; and said new relationships modify at least one relationship between said attributes”, it is requested that the rejection, under 35 U.S.C. § 102, of claims 1, 3-6, 8-11, 13-16, 18-24, 26, 27, and 29-48 be reconsidered and withdrawn.

**Claim Rejections - 35 U.S.C. §103**

Claims 1, 3-6, 8-11, 13-16, 18-24, 26, 27, and 29-48 are rejected under 35 U.S.C. § 103 as obvious over Tuzhilin *et al.*, US Publication No. 2004/0103092, (hereinafter referred to as “Tuzhilin”) in view of Reddy et al, U.S. Patent No. 6,658,413 (hereinafter referred to as “Reddy”).

Tuzhilin and Reddy, whether considered individually or in combination, neither disclose nor suggest “new relationships between said attributes ... said new relationships are not subject to attribute restrictions placed on the database; and said new relationships modify at least one relationship between said attributes” as recited in amended independent claims 1, 11, 20, 27 and 40, as described above.

Tuzhilin teaches providing recommendations to users of multidimensional data. (Abstract) Applicant has found no teaching in Tuzhilin that relationships between attributes are not subject to attribute restrictions placed on a database. In the instant Office Action, paragraphs [0016], [0066]-[0069] of Tuzhilin are cited as teaching that relationships between attributes are not subject to attribute restrictions placed on a database. Applicant respectfully disagrees. The cited portions of Tuzhilin disclose that “at least one of the dimensions may have a hierarchy or profiles.” (Paragraph [0016]). “The profiles may have static characteristics, and ... dynamic characteristics ...” (Paragraph [0016]). The cited portions of Tuzhilin also disclose that “profiling capabilities ... can be significantly expanded.”

(Paragraph [00666]). However, Tuzhilin does not indicate that relationships between attributes are not subject to attribute restrictions placed on a database.

Combing Reddy with Tuzhilin does not overcome the deficiencies of Tuzhilin. In fact, Reddy teaches away from Applicant's claimed invention. Reddy is directed to a multidimensional database in which "aggregatable data are restricted." (Emphasis added (Abstract). Reddy is directed to a multidimensional database system with intermediate lockable intersections. (Title). The "multidimensional database includes hierarchical levels. The data is hierarchical, with aggregatable data measures, so that changes in a first intersection will cause changes in other intersections for the aggregated measure. Selected intersections can be locked, so that changes in aggregatable data are restricted. Constrained sets corresponding to the locked intersections limit the scope of changes which may be made..." (Column 2, lines 9-17).

Because Tuzhilin and Reddy, whether considered individually or in combination, neither disclose nor suggest "new relationships between said attributes ... said new relationships are not subject to attribute restrictions placed on the database; and said new relationships modify at least one relationship between said attributes", and because Reddy teaches away from Applicant's claimed invention, it is requested that the rejection, under 35 U.S.C. § 103, of claims 1, 3-6, 8-11, 13-16, 18-24, 26, 27, and 29-48 be reconsidered and withdrawn.

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37 CFR § 1.116**

### **CONCLUSION**

It is requested that the forgoing arguments, remarks, and amendments be entered, and in view thereof, it is respectfully submitted that this application is in condition for allowance. Reconsideration of this application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow this application for any reason, the Examiner is encouraged to contact the undersigned attorney to discuss resolution of any remaining issues.

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